

What is claimed is:

1. An analysis support apparatus for performing an analysis using geometric data to check characteristics of a structure represented by the geometric data, comprising:
 - a specifying unit specifying one or more types of analyses from among plural types of analyses;
 - an obtaining unit obtaining necessary conditions from among necessary analytical conditions of the plurality of analyses based on the specified types of analyses; and
 - a generating unit generating analytical data formed by at least the obtained analytical conditions and the geometric data corresponding to the specified types of analyses.
2. The apparatus according to claim 1, wherein said analytical data is generated using the obtained analytical conditions as header information about the geometric data.
3. The apparatus according to claim 1, wherein said analytical conditions are extracted by selecting a type of a property of a structure

indicated by the geometric data and a corresponding property value.

4. The apparatus according to claim 1, wherein

5 said analytical conditions include an upper limit of a mesh size when a mesh is generated to obtain analytical data.

5. The apparatus according to claim 1, wherein

10 said analytical conditions include a contact setting of a part boundary.

6. The apparatus according to claim 1, wherein

15 said analytical conditions include a plurality of dimension values or property values provided for selection of an optimum value.

7. The apparatus according to claim 1, wherein

20 said analytical conditions include settings of a shell representation of parts geometric data and of parts weights.

8. The apparatus according to claim 1, wherein

25 said analytical conditions include a wavelength of an electromagnetic field in an

electromagnetic analysis.

9. An analysis supporting method for performing an analysis using geometric data to check characteristics of a structure represented by the geometric data, comprising:

a specifying step of specifying one or more types of analyses from among plural types of analyses;

10 an obtaining step of obtaining necessary conditions from among necessary analytical conditions of the plurality of analyses based on the specified types of analyses; and

15 a generating step of generating analytical data formed by at least the obtained analytical conditions and the geometric data corresponding to the specified types of analyses.

10. The method according to claim 9, wherein
20 said analytical data is generated using the obtained analytical conditions as header information about the geometric data.

11. The method according to claim 9, wherein
25 said analytical conditions are extracted by

selecting a type of a property of a structure indicated by the geometric data and a corresponding property value.

5 12. The method according to claim 9, wherein
said analytical conditions include an upper limit of a mesh size when a mesh is generated to obtain analytical data.

10 13. The method according to claim 9, wherein
said analytical conditions include a contact setting of a part boundary.

14. The method according to claim 9, wherein
15 said analytical conditions include a plurality of dimension values or property values provided for selection of an optimum value.

15. The method according to claim 9, wherein
20 said analytical conditions include settings of a shell representation of parts geometric data and of parts weights.

16. The method according to claim 9, wherein
25 said analytical conditions include a

wavelength of an electromagnetic field in an electromagnetic analysis.

17. An analysis supporting program for directing
5 an information processing device to realize an
analysis supporting method for performing an
analysis using geometric data to check
characteristics of a structure represented by the
geometric data, comprising:

10 a specifying step of specifying one or more
types of analyses from among plural types of
analyses;

15 an obtaining step of obtaining necessary
conditions from among necessary analytical
conditions of the plurality of analyses based on
the specified types of analyses; and

20 a generating step of generating analytical
data formed by at least the obtained analytical
conditions and the geometric data corresponding to
the specified types of analyses.

18. The program according to claim 17, wherein
said analytical data is generated using the
obtained analytical conditions as header
25 information about the geometric data.

19. The program according to claim 17, wherein
said analytical conditions are extracted by
selecting a type of a property of a structure
5 indicated by the geometric data and a corresponding
property value.
20. The program according to claim 17, wherein
said analytical conditions include an upper
10 limit of a mesh size when a mesh is generated to
obtain analytical data.
21. The program according to claim 17, wherein
said analytical conditions include a contact
15 setting of a part boundary.
22. The program according to claim 17, wherein
said analytical conditions include a plurality
of dimension values or property values provided for
20 selection of an optimum value.
23. The program according to claim 17, wherein
said analytical conditions include settings of
a shell representation of parts geometric data and
25 of parts weights.

24. The program according to claim 17, wherein
said analytical conditions include a
wavelength of an electromagnetic field in an
5 electromagnetic analysis.

25. The apparatus according to claim 1, wherein
said generating unit further generates the
analytical data formed by the specified types of
10 analyses.

26. The method according to claim 9, wherein
said generating step further generates the
analytical data formed by the specified types of
15 analyses.

27. The program according to claim 17, wherein
said generating step further generates the
analytical data formed by the specified types of
20 analyses.

28. The apparatus according to claim 1, wherein
said obtaining unit obtains a property value
which is a necessary analytical condition in the
25 specified analysis from a material database.

29. The method according to claim 9, wherein
said obtaining step obtains a property value
which is a necessary analytical condition in the
5 specified analysis from a material database.

30. The program according to claim 17, wherein
said obtaining step obtains a property value
which is a necessary analytical condition in the
10 specified analysis from a material database.